CLAIMS

1.   (Currently amended) In a wireless data communications system wherein data communications are provided between mobile units and a central computer via access points in accordance with a wireless communication standard protocol, and wherein the mobile units monitor polling signals from the access points and associate therewith for purposes of data communications in accordance with the wireless communication standard protocol, the improvement comprising:

wherein at least some of said access points are connected to said central computer through at least one data switching hub,

wherein said data switching hub carries out the association of access points and mobile units, and maintains a list of the the access points and their associated mobile units generated during association, and

wherein said data switching hub provides the functionality of the wireless communications standard protocol that selectively sends data communications to access points connected to said hub in accordance with destination address data in said communications,

wherein at least some of the access points each provides a conduit for data communication to the mobile units independently of the destination address data in said communications that identify a mobile unit.

2.   (Original) The improvement specified in claim 1 wherein said data switching hub is arranged to monitor source address data in communications received from each access point connected to a port of said data switching hub, wherein said switching hub is arranged to maintain a routing list correlating said source address data with said port of said data switching hub and wherein said switching hub is arranged to use said list to selectively provide said data communications to said access points.

3-7.   (Cancelled).

2

8.   (Previously presented) A method for providing data communications between mobile units and a central computer comprising:

connecting said central computer to at least one switching hub over a wired data communications network, wherein the switching hub provides the functionality of a wireless communications standard protocol that selectively sends data communications to access points;

connecting a plurality of access points to ports of said switching hub;

generating, at the access points, polling signals;

monitoring, at the mobile units, the polling signals and associating mobile units with selected ones of said access points in accordance with the polling signals as specified by the wireless communications protocol;

providing data communications packets on said wireless communications network, said packets including destination addresses each identifying a mobile unit;

maintaining a routing list at said switching hub relating said ports to said access points and to said mobile units associated with said access points wherein the routing list is determined during association of the mobile units to the access points;

operating said switching hub to relay data communications packets from said wired data communications network to said access points in accordance with said routing list and in accordance with the wireless communication standard protocol; and

relaying data communications received from said switching hub by said access points to associated mobile units by radio communications independently of the destination addresses identifying the mobile units in the data communications packets.

9.   (Original) A method as specified in claim 8 wherein said access points are arranged to not relay a selected type of data communications received from said switching hub.

10.   (Original) A method as specified in claim 8 further including the steps of:

providing data communications packets from one of said mobile units by radio communications to an associated access point, said packets including a destination address and a

source address corresponding to said mobile unit;

relaying data communications packets received by said access points from said mobile units to a port of said switching hub; and

operating said switching hub to relay said data communications packets received from said access points to said wired data communications network or said other access points in accordance with said destination address and to update said routing list at said switching hub by relating said port of said switching hub to said source address of said data packet.

11.   (Previously presented) A method as specified in claim 10, wherein said mobile units are further arranged to send a data communications message upon associated with an access point, said message causing said switching hub to update said routing list with the address of said mobile unit.

12.   (Previously presented) A method as specified in claim 10 wherein said access points are arranged to send a data communications to said switching hub when a mobile unit becomes newly associated with said access point, said message having a source address corresponding to said newly associated mobile unit and causing said switching hub to update said routing list with the address of said mobile unit.

13-23 (Cancelled).

24.   (New) The improvement of claim 1, wherein the wireless communication standard protocol is an 802.11 protocol.

25.   (New) The improvement of claim 1, wherein the switching hub is connected to the access points via a wired Ethernet connection.

26.   (New) The improvement of claim 25, wherein the access points receive power via the Ethernet connection.

4